

A Review of a Two-Phased Population Study of Multiple Chemical Sensitivities

Stanley M. Caress and Anne C. Steinemann
doi:10.1289/ehp.5940 (available at <http://dx.doi.org/>)
Online 9 April 2003



A Review of a Two-Phased Population Study of Multiple Chemical Sensitivities

Stanley M. Caress, Ph.D.
State University of West Georgia
Carrollton, GA 30118

Anne C. Steinemann, Ph.D.
Georgia Institute of Technology
Atlanta, GA 30332-0155

Corresponding Author: Stanley M. Caress Ph.D.
State University of West Georgia
1601 Maple Street
Pafford Building - Room 121
Carrollton, GA 30118
Phone: 770 836-6504
FAX: 770 836-4665
scaress@westga.edu

Review Study Multiple Chemical Sensitivity

Key Words: Multiple chemical sensitivities, MCS; Environmental Illness; Toxicant induced loss of tolerance, TILT; Chemical injury.

Abbreviations: MCS - multiple chemical sensitivities; NAS - National Academy of Sciences; CDHS - California Department of Health Services

Acknowledgments: We want to thank Caitlin Waddick, Joanne Mantell Ph.D., Lori Beth Margolin, and Anita Immele for their assistance.

Outline of Section Headers

ABSTRACT

INTRODUCTION

MCS Prevalence

Previous Prevalence Research

FIRST PHASE

Methods: First Phase

First Phase Findings

Discussion of First Phase Findings

SECOND PHASE

Theories of Etiology and Dynamics

Methods: Second Phase

Second Phase Findings

Severity and Reaction Duration of Symptoms

Types of Symptoms

Triggering Mechanisms and Etiology

Linkage to Other Medical Conditions

Linkage to Mental Illness

Lifestyle Modifications

Demographics

Discussion of Second Phase Findings

REFERENCES

TABLES

APPENDIX

ABSTRACT

This paper summarizes the findings of a two-phase study of the prevalence, symptomology, and etiology of multiple chemical sensitivities (MCS). It also explores possible triggers, the potential linkage between MCS and other disorders, and the lifestyle alterations produced by MCS.

The first phase of the study consisted of a random sampling of 1,582 individuals from the Atlanta, Georgia metropolitan area to determine the prevalence of a reported hypersensitivity to common chemicals. This phase found that 12.6% of the sample reported a hypersensitivity. Further questioning of individuals with a hypersensitivity indicated that 13.5% (1.8% of the entire sample) reported losing their job because of their hypersensitivity.

The second phase was a follow-up questioning of the respondents who initially reported the hypersensitivity. This phase found that individuals with the hypersensitivity experience a variety of symptoms and triggers. A significant percentage (27.5%) reported that their hypersensitivity was initiated by an exposure to pesticides, while an equal percentage (27.5%) attributed it to solvents. Only 1.4% had a history of prior emotional problems, but 37.7% developed these problems after the physical symptoms emerged. This suggests that MCS has a physiological and not a psychological etiology.

INTRODUCTION